Abstract of the Disclosure

A disinfection reactor for disinfecting liquid, such as water from a water filtration plant, by exposing the liquid to ultraviolet light. The reactor includes a generally rectangular reactor vessel and two or more medium pressure ultraviolet lamps that extend within the reactor vessel in a direction transverse to the direction of liquid flow therethrough. The reactor vessel includes liquid guide surfaces that guide liquid to flow in a converging flow path having a reduced-area flow region in the vicinity of the ultraviolet lamps. The ultraviolet lamps are positioned spaced from and between the guide surfaces.